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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/536,748	02/07/2006	Maria Palmquist	15097NP	2219

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Ralph A. Dowell of DOWELL & DOWELL P.C.
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Alexandria, VA 22314

EXAMINER

ALI, SHUMAYA B

ART UNIT	PAPER NUMBER
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3771

MAIL DATE	DELIVERY MODE
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08/09/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/536,748

Applicant(s)

PALMQUIST, MARIA

Examiner

Shumaya B. Ali

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 May 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 September 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 7/5/07 has been entered.

Response to Arguments

Applicant's arguments with respect to claim 5/10/07 have been considered but are moot in view of the new ground(s) of rejection.

Drawings

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the **bellows-like structure having folds** must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the

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drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claim 1 is rejected under 35 U.S.C. 101 because in line 3 with the recitation of "a protection that is **arranged** over at least a nose and a mouth" appear to claim human body because the protection is using a user's face as a reference point.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-6 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, lines 5 and 6, the recitation of "at least extends to adjacent ground level" is indefinite. It appears that Applicant is claiming a ground and using the ground as a reference point. Furthermore, it is not clear whether by "adjacent" Applicant means close to the foot or

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knee height? The measure of height that is limited by “adjacent” cannot be determined, thus the recitation of “extends to the adjacent ground level” is considered indefinite.

In claim 6, lines 3-5, the recitation of “bellow-like structure having folds so that the tubular body can be compressed and compacted to a compact and substantially flat space saving unit” are considered indefinite. It is understood that the “bellow-like structure having folds” would provide some form of rigidity to the tubular body to maintain the shape of the tubular body at an extended form as depicted in figure 3B. Therefore, it is not clear how a rigid tubular body is compressed and compacted to a “substantially flat” unit. The structure of the “bellow-like structure with fold” renders that the tubular body will still be cylindrical at a compressed and compacted form as depicted in figure 3A. Applicant may be referring to the tubular body at a compressed form can be placed in a substantially flat unit. Furthermore, structure and/or the metes and bounds of ranges that may define a “substantially flat unit” are not clear. Appropriate clarification is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1,3, and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over GB 2134393A to Richardson et al. in view of Marshall US 4,669,462.

As to **claim 1**, Richardson discloses an apparatus in figure 1 which is capable for securing inhalation of substantially smokeless air from a smoky room (col.1, lines 5-15 of Richardson states the apparatus is used by person who find themselves obligated to spend some time in a smoke-filled room), the apparatus comprises a protection (mask 32) that is arranged over at least nose and mouth at face of a user (see “mask may be adapted to fit over the nose and mouth region only” as recited on page 1, lines 68-70; also see figure 1), a tightly arranged tubular body (16) is connected to the protection and that forms a length (L) in an elongated condition that at least extends to adjacent aground level when the user is standing (as depicted in fig.1), a nozzle (36) is arranged at a first end of the tubular body at the inside of the protection adapted to be placed against the mouth of the user (see fig.1), which communicates with an air inlet opening (24) in a second end of the tubular body and the protection are formed of flexible materials (see page 1, line 49), and both the protection and tubular body are compactable to and/or expandable (“the tube is preferably formed of a flexible plastic material such as polyvinylchloride” see page 1, lines 65-66; “mask 34 of flexible plastic material” lines 121-122, therefore, the construction material of the tube and mask make the protection and tube expandable and compactable to certain degree) from a folded condition which forms a compact package that has substantial propagation in one plane and requires a little space (expected result from bending/folding of the protection and tube for packaging).

Richardson however lacks the tubular body is axially compressible to form a substantially flat unit without significant elongation in length. However, Marshall in an apparatus, disposable emergency respirator that can be used in a smoke environment (see col.1, lines 1-10) teaches a pliable and foldable thermoplastic face cover with an elongated tube (fig.4, 11). Marshall further

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teaches that the face cover and the tube can be extended from a folded (“axially compressible” position (see fig.1) to an extended position (see fig.4) for use. Marshall continues to teach that the face cover and the tube can be packed into to obtain a substantially flat unit without significant elongation of length (as seen in fig.1) to be packed in a plastic bag (see fig.5).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify mask and tubular body of Richardson (since Richardson discloses that his scope of the invention includes changes to the design and construction of the mask and the tubular body (see col.2, lines 62-64)) in order to allow the mask and tubular body to axially compress into a substantially flat unit without significant elongation of the length for the purposes of compactable storage of the mask and tubular body as taught by Marshall.

As to claim 3, Richardson discloses wherein the tubular body includes a fastening apparatus (30), suitably adjacent of the air inlet opening in an outer portion of the tubular body, whereby the air inlet opening of the tubular body is retained adjacent a lower leg or foot of the user (via 28).

As to claim 4, Richardson discloses a valve (“valve means is provided in mask 32 to control the flow of air into and out of the mask”, see page 2, lines 1-2) for control of inhaled and exhaled air is arranged in the tubular body, which is connected to the protection.

Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Richardson et al. GB 2134393A in view of Marshall US 4,669,462 and in view of Smith US Patent No. 5,377,670.

As to claim 5, Richardson as modified by Marshall discloses the claimed invention as applied for claim 1 with the exception of “helical strip arranged in the air channel, that in

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elongated state substantially corresponds to the length formed by the air channel". However, at the time of the invention, twisting/crenulations structure used inside a breathing tube was well known to one of ordinary skills in the art. Smith teaches corrugated tube, where the corrugations are provided along the length of the tube to facilitate bending or shaping the tube without risk of stopped gas flow because of the kinking (see col.5 lines 45-49). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to provide the apparatus of Richardson an inner corrugated structure inside the tube (16) for the purposes of preventing kinking of the tubular body as taught by Smith.

Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Richardson et al. GB 2134393A in view of Marshall US 4,669,462 and in view of Sheridan et al. US 4,85,564.

As to claim 6, Richardson discloses wherein the tubular body is formed of a thin walled, elastic and flexible material (see col.1, lines 48-51, 64, and 65). Richardson however lacks that the tubular body is provided with a bellow-like structure having folds so that the tubular body can be compressed and compacted to a compact and substantially flat space saving unit. However, breathing tube with claimed bellow-like structure with folds was known to one of ordinary skill in the art at the time of the invention. Sheridan teaches a flexible connector unit that allows connection and passage of breathing air (see col.3, lines 65-69) with flexible bellow-like folds (see fig.2, 14) that can be compressed and compacted (as shown in fig.8, see also col.4, lines 20-40) to a compact and substantially flat space saving unit (notice that in an extended form the tube can be bend, thus the curved nature of the tube will not be substantially flat on a horizontal plane, however, the bending is not possible at a compacted form as depicted

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in figure 8, which can stay substantially flat at a horizontal plane). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Richardson in order to provide a bellow-like fold on the tubular body for the purposes of allowing tubular body to bend as taught by Sheridan (see col.2, lines 27-30).

Allowable Subject Matter

The indicated allowability of claim 2 is withdrawn because of the rejection set forth under 35 USC 112. Claim 2 however would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Morgan (1,090,936), Wasylłowich (1,299,075), Biggs (2,144,611), Hurd (396,161), Webster (4,768,235), are Grilliot et al. (6,349,721) are cited to teach protective apparatus that can be used at an smoky environment.

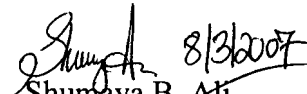
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shumaya B. Ali whose telephone number is 571-272-6088. The examiner can normally be reached on M-W-F 8:30am-5:00 pm.

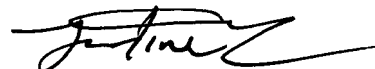
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Justine Yu can be reached on 571-272-4835. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications

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may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Shumaya B. Ali
Examiner
Art Unit 3771


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8/5/07